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Ad. Lund. of Harvard

A Treatise

Published March 3^d 1829

on

Spina Bifida

With two cases of its treatment

By

Isiah Barnes A.M.

Litchfield. (Conn.)

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The student of medicine, cannot be supposed a person of
enlarged experience: his knowledge is purely elementary & derived ei-
ther from instructors, or from books. Hence in that *sine qua non*
a *this* is, he must come forth literally the trumpet of the thought & say of
others. And here his situation is peculiarly hard. The pretensions of learn-
ed lore is professing—the treatment of disease, has been touched & retouched
by various authors, with a similarity so exact, that we can safely say of
them, "O imitatoris serile pecus." Theory & speculation alone remain
to throw light over subjects hitherto involved in darkness, or cast a deeper
shade over existing uncertainty. But theories like bubbles rise & burst.
They are for the most part mere floating evanes of the imagination.
—And what communion has this with medicine? Can it spot the chemist
as he holds the crucible, — the botanist as he examines the character of plants
— the physician & surgeon as they feel the throbbing pulse, or check the stream-
ing blood, — or the anatomist as he lifts the dissecting knife, & exposes to
his engineering gaze the lifelike remains that lie outstretched before him?
No, these are things tangible & realising. Experiment & observation, a
discriminating mind, a sound judgment, an acute perception, & the
entire use of all the senses constitute the perfection of our art.

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That has given the name of Chyick, the scattered rank it holds in the profession? Is it the use of the qualities I have mentioned, & the improvements he has introduced & the map of facts he has contributed. Who would relinquish his eminence for that of the more thirist? If a great man is not an anomaly in nature such an one deserves the title. Thus those master spirits that are scattered over centuries, "vasi nantes in gurgite vasto," acquired renown, & thus in our profession will it be sought by all aspirants after fame.

Convinced then of my inability to add any thing to the subjects discussed in course by the several professors, & of the futility of theorizing aside from practical illustration, I have left the common routine, & chosen one of the opprobria (viz) Spina Bifida. Two cases of its successful treatment have fallen under my observation, & as the practice was in some respects new & peculiar, the relation of them will not perhaps be unprofitable. It may first however be proper, to give a general description of the disease as described by authors.

Spina Bifida (two spines) derives its name from the two fold opening found in the spine, the usual channel for the spinal marrow & the unnatural fissure, from which issues a tumour filled with a

fluid that constitutes the disease. It is congenital, or appears very soon after birth, occupying different portions upon the spinal column from the cervix to the extremity of the sacrum. The size & shape also vary upon different patients. Cases are recorded where the tumor was no bigger than a walnut, & others again where it reached the magnitude of a child's head. In one instance it is said to have formed a ridge parallel with the spine for its whole length. Sometimes it presents a flattened surface, but little elevated, & at others it forms a very considerable protuberance, with the greatest diameter at the anterior extremity, & the smallest at its attachment to the spine. The swelling, whatever its situation & dimensions may be contains a fluid that is generally transparent, & resembling serum. Though from the analysis of Dr. Marek its specific gravity is 22.5 less than the specific gravity of serum. It however agrees very nearly with the fluid that lubricates the ventricles of the brain, showing pretty conclusively that both proceed from an identity of structure. This fluid, upon puncturing ^{the tumor}, has been seen tinged with blood. This appearance was probably derived from an infiltration of blood into the surrounding cellular tissue, which would easily upon opening be

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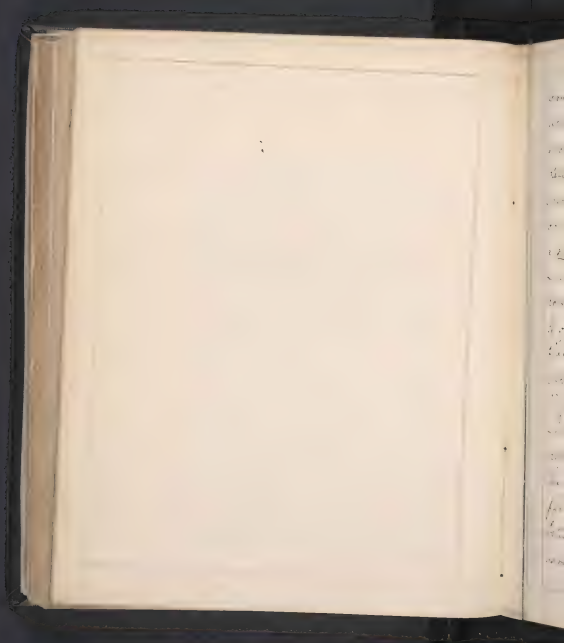
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come miscell with the more diluted & edowly fluid, that occu-
pied the cavity of the tumor. A fluctuation is always percepti-
ble upon pressure, the integuments are much distended, & at some
points thinned so much as clearly to show what is contained within.
If the enlargement is constant from birth, or from the time of
its first appearance as usually is the case, it bursts spontaneously
by & soon proves fatal.

Paralysis of the lower extremities, involuntary discharge of α
are said to be occasionally the concomitants of this disease. -
This can readily be accounted for from the fact, that in all cases of B. fluid
of spine there is a deficiency of bone where the swelling protrudes - the
spinous process are entirely wanting or there is a partial formation
& the tumor arises between the bones. The spinal marrow then is
destitute of its usual protection, & is made to sustain the weight
of an accumulating fluid, pressed strongly by the resistance of the ex-
ternal integuments, & the membranous sheath that lines the bone internally.
As a consequence the action of the internal fasciculi of fibres is suspen-
ded - the nerves, given off below the swelling, are shut out from effe-
tual communication with the brain, & from the point where this

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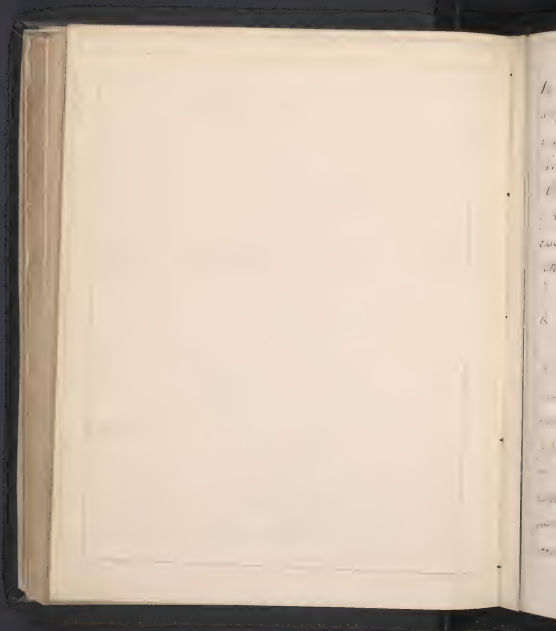
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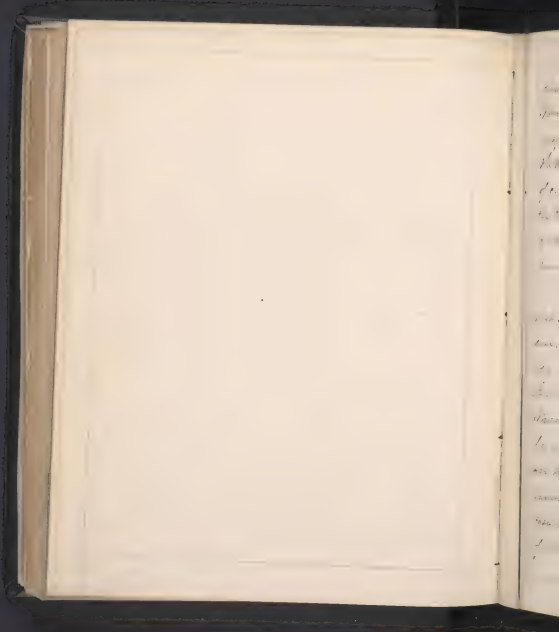
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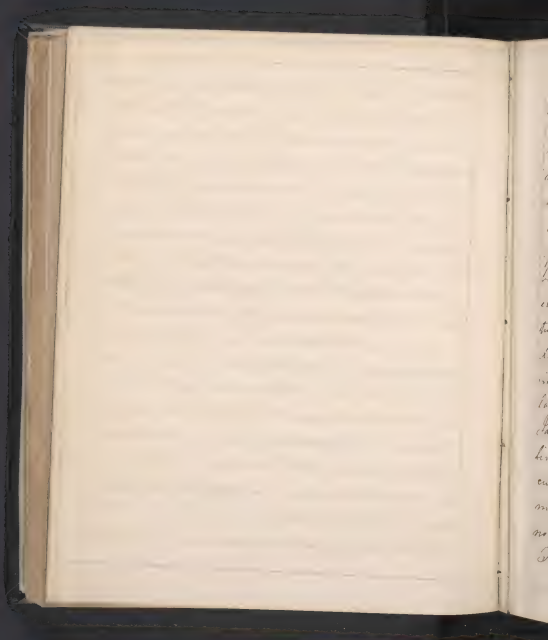
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Physicians had already pronounced the disease Spina Bifida
incurable. Dr A. advised the recumbent position, the Tinct. Iodine
& an adhesive plaster to cover all the lumbar, dorsal & lumb. sacral
vertebrae. The child was accordingly placed upon a pillow
& for five weeks was not raised to a perpendicular position.

More than 90 of this time it lay upon its back. The Tincture
of Iodine was given to such an extent as the stomach would
bear without inconvenience. A second blister was applied
even 8th or 10th day at the end of the time above specified. The
tumors had entirely disappeared & nothing unusual could be
discovered upon the back. Recovery was consequently an expect-
ation - no hopes of recovery were entertained more barren
for minutes of the progress of the case were neglected.

Jan'y. 1829. The child is stout & healthy & perhaps as much like
his brothers & activity as most children of his age. For greater cer-
tainty the treatment was continued for some time after the tu-
mors had disappeared, but at length it was suspended, & there has been
no necessity for its renewal.

The second case in which Dr A. was consulted, was a child of 2 1/2



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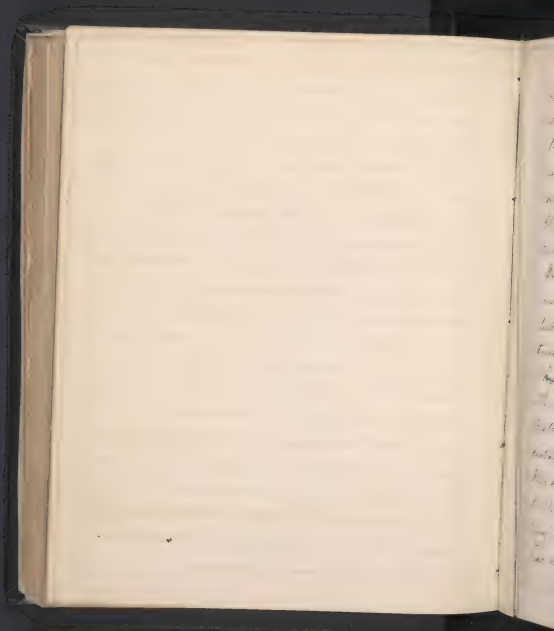
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Under a judicious management than the application of St. Lazarus
in particular cases especially where the tumor is attached by a ped-
icle is superior to every other mode of treatment. By carefully remov-
ing all sources of irritation & pursuing at the same time a well
regulated course of general treatment in accordance with some-
times practice we have no doubt a speedy cure might often
be effected, when now no consolation is offered to the parents
or assistance to the child.

When called to cases of this sort I grant the surgeon is del-
icately situated. The cases of cure are extremely small, &
few have the boldness to undertake what has been so rarely
accomplished. He recollects that among people ignorant
of the profession, the reputation of a surgeon may be unjustly
ruined. If he abandon the child to its fate, as is too often
done, pain & misery may be avoided; yet if it die under treatment
& the chances are manifest that it will — even should it survive
he has lost scarcely a single hour, his character may receive
irreparable injury. But at such a time timidity & such
rings are alike culpable. The doubtful remedy is all

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the performance of duty. Life is desirable under almost any
circumstances. The instinctive love of life gave birth & support
to medicine, & will give it perpetuity. The practitioner then
should spare no efforts for its preservation till all hope is ut-
terly extinguished. Viewing medicine as a beautiful sys-
tem of inductive philosophy, let him proceed to the applica-
tion of remedies, & not be daunted although some dis-
eases are still regarded as incurable. By practical deduc-
tions from general principles, & the application of new ^{remedies or} modes
of treatment they may possibly be overcome;—and it
is no common merit to have rescued a single individual
from an untimely end.

My dear friend,
I have just received your letter of the 10th inst. and am
glad to hear that you are well. I am also well and hope
this letter will find you the same. I have been thinking
much of late of the friends of the cause and of the
work that is to be done. I feel that we must be
more united and more active than ever. I hope
that you will be able to do much for the cause
in the future. I am, dear friend, ever
your sincere friend,
Wm. Lloyd Garrison

